

**Town of Altona  
Public Water System  
Annual Report 2023**

The Town of Altona 2023 Annual Public Water System Annual Report will be posted on the Town website ([www.altona.ca](http://www.altona.ca)) by February 1, 2024.

Free paper copies of the report are available at the Town of Altona administration building located on 111 Centre Avenue East.

The public will be notified via the Town's website as well as a poster on the Town's bulletin board in the Town office.

**Town of Altona Public Water System  
Annual Report 2023**

Name of the Public Water system: **Altona Public Water System**

Name of the Legal Owner: **The Town of Altona**

Phone: **204.324.6468**

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**Report Prepared: January 18, 2024**

**The 2023 Annual Report for the Town of Altona summarizes the Water Utility's ability to distribute safe potable water and meet provincial regulations.**

## **1. Description of the Water System:**

The Altona Public Water System (Altona PWS) provides potable water to a population of approximately 4,400 residents. Treated water purchased from the Pembina Valley Water Coop meets all objectives as stated in the Guidelines for Canadian Drinking Water Quality.

### **1.1 Water Supply Source**

The Altona PWS receives treated water from Letellier, Mb. which is approximately 20 kilometers east of Altona. The Letellier plant draws raw water from the Red River and treats the water before distribution.

### **1.2 Distribution System**

Treated water from the two reservoirs is pumped throughout the Altona distribution system via four variable frequency driven 15 horsepower duty pumps in two pumphouses, plus two 75 horsepower emergency pumps. The approximate 34 kilometers of piping is 99% looped and is comprised of 58% AC, 41% PVC, and 1% HDPE.

### **1.3 Storage Reservoirs**

Name: North End Reservoir  
Name: South End Reservoir

Capacity: 3 222 000 L  
Capacity: 1 453 000 L

## **1.4 Number of Connections, population served and types of users**

The Altona distribution system is comprised of 1,748 service connections. 2021 census indicates a population of 4390. All connections are metered. Domestic use is the largest consumer with approximately 65% while commercial use is approximately 35%.

## **1.5 Classification and Certification**

Operators are certified under Manitoba Conservation's *Water and Wastewater Facility Operators Regulation* under the *Environment Act*

Clint Derksen- Supervisor	ID # 2014-081 - WD2, WWC2, WWT1
Jackson Enns-Foreman	ID # 03223 - WD2, WWC2, WWT2
Scott Klassen-Assistant	ID # 03849 - WD2, WWC2, WWT2
Kirby Sawatzky-Assistant	ID # 04305 - WD1, WWC1, WWT1

*WT - Water Treatment*

*WD - Water Distribution*

*WWT - Waste Water Treatment*

*WWC - Waste Water Collection*

*CC - Conditional Certificate*

## **2. Disinfection system in use**

The last step before distribution is the addition of 12% liquid sodium hypochlorite to the water while entering the reservoirs. The dosage is flow-paced to maintain a minimum of 0.5 mg of free chlorine per litre before it enters the distribution system and

we maintain a minimum of 0.1 mg of free chlorine per litre at all times in the distribution system.

## 2.1 Equipment and monitoring requirements

As required, the Altona PWS ensures continuous disinfection is maintained by stocking all spare parts for all chlorinators.

Free Available and Total Chlorine residuals are monitored daily by staff, on-line chlorine analyzers at each reservoir, and bi-weekly throughout the distribution system. A Hach brand portable colorimeter test kit, which is calibrated annually, is used for the testing at the South reservoir, and an Orbeca brand portable colorimeter test kit, which is also calibrated annually, is used for the testing at the North reservoir. All results are recorded on the appropriate monitoring forms and submitted to the Office of Drinking Water monthly. Bi-weekly samples are sent to ALS labs for testing. THM/HAA analysis are required every other year. In 2024 we will also be testing for manganese.

Tests performed bi-weekly:

- **Total Coliform:** a measurement of the total coli form present in bi-weekly samples submitted to ALS labs.
- **Escherichia coli:** a measurement of the Escheria coli present in bi-weekly samples submitted to ALS labs.

Quarterly samples, every other year, are also collected in the distribution system and sent to the lab for **THM** testing and **HAA** testing.

- **THM** is the abbreviation for Trihalomethane, which is a chlorination/disinfection byproduct.
- **HAA** is the abbreviation for Halo Acetic Acid, which is a chlorination/disinfection byproduct.

## 2.2 Overall performance

In 2023, the Altona PWS had one positive result for Coli form from a bad distribution sample. The following tables outline the requirements and performance of the PWS in the Town of Altona for 2023 as outlined in the Operating License.

### **Disinfection Monitoring and Reporting**

	<b>Regulatory Requirement</b>	<b>PWS Performance</b>
A) Free Chlorine residual entering the distribution system Section 21(1)a – MR 40/2007	≥ 0.5mg/L	100%
B) Frequency of testing entering the distribution system Section A – MR 40/2007	Daily	100%
C) Free Chlorine residual in the distribution system Section 22a – MR 40/2007	≥ 0.1mg/L	96%
D) Frequency of testing in the distribution system Section A – MR 40/2007	Bi-Weekly	100%
E) Report Submissions Section 25(2) – MR 40/2007	Monthly	100%
The PWS has met all regulatory requirements for 2023 in this area.		

### **Bacteriological Monitoring and Reporting**

	<b>Regulatory Requirement</b>	<b>PWS Performance</b>
A) Number of samples of watering leaving the North End Reservoir Schedule A – MR 40/2007	26	100%

B) Number of samples of watering leaving the South End Reservoir Schedule A – MR 40/2007	26	100%
C) Number of distribution water samples Schedule A – MR 40/2007	26	96%
D) Frequency of Testing Schedule A – MR 40/2007	Bi-weekly	100%
E) Total Coli form present in samples Section 3(1)b – MR 40/2007	0 TC per 100ml*	96%
F) E. Coli present in Samples Section 3(1)a – MR 41/2007	0 EC per 100ml	100%
The Public Water System has met all regulatory monitoring requirements for 2023. The water system was deemed to be in compliance with all terms and conditions in the Operating License.		

On December 18, 2023, our distribution sample came back positive for Coli form. Two consecutive re-samples, consisting of three samples each, gathered the following day, came back negative. We attribute this anomaly to a bad sample.

**Disinfection By-products Monitoring and Reporting – THMs and HAAs**

<b>Water System</b>	<b>Q1 THM</b>	<b>Q2 THM</b>	<b>Q3 THM</b>	<b>Q4 THM</b>	<b>Avg</b>
ALTONA 4.00	N/A	N/A	N/A	N/A	N/A
<b>Water System</b>	<b>Q1 HAA</b>	<b>Q2 HAA</b>	<b>Q3 HAA</b>	<b>Q4 HAA</b>	<b>Avg</b>
ALTONA 4.00	N/A	N/A	N/A	N/A	N/A

Currently we are unable to achieve the required level of THM and HAA's due to the treated water being out of compliance when it arrives at our distribution stations.

**Engineering Assessment of Water System Infrastructure and Water Supply Source**

As specified by the operating license, the Altona PWS was required to initiate an Engineering Assessment of the Water System Infrastructure and Water Supply Source. J.R. Cousin Consultants completed the Town of Altona Public Water System Assessment 2016 PWS 4.00. Two copies of the report were mailed to The Office of Drinking Water.

**3. Water Rates**

In 2023 our water rate was \$13.75 per 1000 Imperial gallons.

**4. Water System Incidents**

In 2023 there were no major incidents.

**4.1 Major Expenses**



In 2023 we replaced all residential meters with smart meters.

## **5. Drinking Water Orders**

In 2023 there were no Safety Orders issued for Altona Public Water System.

## **6. Boil Water Advisories (BWA's) issued and actions taken**

In 2023 there were five BWA's issued due to water main breaks and repairs.

1. February 24 @ 2<sup>nd</sup> St NE
2. July 19 @ 4<sup>th</sup> Ave NE
3. July 20 @ 4<sup>h</sup> Ave NE
4. July 22 @ 4<sup>th</sup> Ave NE
5. October 3 @ 4<sup>th</sup> Ave SE

4<sup>th</sup> Ave NE breaks in July was one BWA that got extended due to brittle pipe in that area.

The Office of Drinking Water was notified of all BWA's and cc'd on all lab analysis reports.

## **7. Operational Requirements**

The Town of Altona is continually in non-compliance with both THM and HAA requirements issued for the Altona Public Water System. We are working with Pembina Valley Water Corporation to remedy this in the future.

## **8. Major Waterline Extensions 2023**

In 2023 we extended our industrial park which added 937 meters of PVC potable water main line (PWS-22-P50, 19

December 2022).

## **9. Future System Expansion**

In 2024 there is a small private development planned in the NW corner of Altona (PWS-23-P23, 17 November 2023).

Report Prepared by:



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